TRANSLATION OF THE ANNEXES (AMENDED SHEETS) TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

driven at variable speeds and as a function of screw clearance.

Various solutions are known to secure the molds in a pellet mill. The initially mentioned fixed arrangement, which involves simply screwing down the mold, is cost-effective, but necessitates a time-consuming mold replacement. However, there are also known solutions for a quick replacement, e.g., according to USP 4979887, in which short-stroke hydraulic cylinders on the periphery of a wear ring actuate the individual clamping segments. The hydraulic cylinders are connected to an external hydraulic pump for replacing the mold.

Also known according to DE-OS 2108326 is to hold the clamping segments in the position that clamps the matrix using spring elements to improve assembly, wherein adjusting means are provided for detaching the clamping segments against the spring action. The matrix overcomes the spring tensioning forces, making it easy to detach from the column or reattach. Hydraulic winches are used as the adjusting means. As similar solution is shown in DE-OS 2756647, in which a conical ring is used to attach the matrix.

The object of the invention is to design a pellet mill in such a way as to enable a simple, and at once sanitary and cost-effective mold replacement. The object is achieved with the features in claim 1.

The invention is based upon the knowledge of simultaneously actuating all clamping segments via only a single element, so that the mold can be detached from the pellet mill. This is preferably accomplished using a pressure ring, which can be moved in the mold axis by

CLAIMS

1. A pellet mill with a hollow cylindrical mold (8) that has a radial borehole (10), and whose inner circumferential surface accommodates at least one press roller (9) eccentrically thereto in such a way that it can roll off, and the mold (8) is placed on a mold carrier (11), and essentially non-positively detachable or secured, characterized in that clamping segments (17) are arranged between the mold (8) and a pressure ring (13) of the mold carrier (11), wherein a contact surface is flatly formed between the adjusting elements of the clamping segments (17) and the pressure ring (13), and that the clamping segments (17) are accommodated in guide elements.

2. The pellet mill according to claim 1, characterized in that each guide element has a screw (18) with at least one spring packet.

3. The pellet mill according to claim 2, characterized in that the guide elements are connected with the clamping segments (17).

4. The pellet mill according to at least one of claims 1 to 3, characterized in that a fluidic element is arranged behind the pressure ring (13).

5. The pellet mill according to at least one of claims 1 to 4, characterized in that a fluidic element (21) according to one of claims 10 or 11 is arranged behind the pressure ring (13).

6. A clamping device for separating a cylindrical section from a carrier unit, wherein the cylindrical section is essentially non-positively

secured or detachable in an axial direction, characterized in that clamping segments (17) are arranged between the section and a pressure ring (13) of the carrier unit, wherein a conical contact surface is formed between the clamping segments (17) and the pressure ring (13), and that the clamping segments (17) are accommodated in guide elements so that they can axially shift.

7. The clamping device according to claim 6, characterized in that the section is a hollow cylindrical mold.

8. The clamping device according to claim 6 or 7, characterized in that the guide elements are connected with the clamping segments (17).

9. The clamping device according to at least one of claims 6 to 8, characterized in that a flexible, fluidic element is arranged behind the pressure ring (13) in the gap to a ring (12).

10. The clamping device according to claim 9, characterized in that the fluidic element is an air cushion (21).

11. The pellet mill with a hollow cylindrical mold (8), on whose inner surface at least one adjustable press roller runs (9), characterized in that a base (31) is secured to a main shaft (33) of the mold (8) in such a way that it can rotate with the main shaft (33), and has hinged centrally to it two pairs of lever arms (32) provided with a yoke, and their opposing ends are hinged or pivoted to cams (34) of the press rollers (9), wherein the lever pairs are each connected with an

element that is also hinged to the cams (34) and can shift on the base (31).

12. The pellet mill according to claim 11, characterized in that the elements can be shifted by means of a spindle.

13. The pellet mill with a driving wheel (15) of a mold (8), wherein the driving wheel (15) is mounted on a driven main shaft (33), characterized in that the driving wheel (15) is connected by a V-belt (43) with a parallel arranged vertical shaft (42), which in turn is connected with a drive by another V-belt (41).

14. The pellet mill according to claim 13, characterized in that the belt drive (43) encompasses at least one V-belt (43).

15. The pellet mill according to claim 13 or 14, characterized in that the drive encompasses two parallel arranged motors (40).

16. The pellet mill according to claim 16, characterized in that the motors (40) are adjustably arranged.

17. The pellet mill according to claim 11, characterized in that at least one main bearing of a roller retaining shaft is equipped with a grease depot (45).

18. The pellet mill according to claim 18, characterized in that a distributing element (46) is provided on the mold carrier (11).